

## IN THE CLAIMS

1. (currently amended) Low expansion transparent glass-ceramics obtained by heat treating a base glass produced at a melting temperature of 1530° or below, said glass-ceramics containing 0.5 - 2% on the basis of the amount of total oxides having an average linear thermal expansion coefficient ( $\alpha$ ) within a range from  $+6 \times 10^{-7}/^{\circ}\text{C}$  to  $+35 \times 10^{-7}/^{\circ}\text{C}$  within a temperature range from 100° to 300° and having 80% transmittance wavelength ( $T_{80}$ ) of 700nm or below.
2. (original) Low expansion transparent glass-ceramics as defined in claim 1 wherein internal transmittance for a plate having thickness of 10mm is 75% or over at light wavelength of 1550nm.
3. (original) Low expansion transparent glass-ceramics as defined in claim 1 having a heat resisting temperature of 800° or over.
4. (original) Low expansion transparent glass-ceramics as defined in claim 1 having Young's modulus of 90 GPa or over.
5. (original) Low expansion transparent glass-ceramics as defined in claim 1 containing  $\beta$ -quartz or  $\beta$ -quartz solid solution as a predominant crystal phase.
6. (original) Low expansion transparent glass-ceramics as defined in claim 1 containing 1.5% - 3.5%  $\text{Li}_2\text{O}$  in mass % on the basis of amount of total oxides.

7. (original) Low expansion transparent glass-ceramics as defined in claim 1 wherein amount of eluting lithium ion is less than  $0.0050\mu\text{g}/\text{cm}^2$ .

8. (original) Low expansion transparent glass-ceramics as defined in claim 1 containing 3% - 6%  $\text{TiO}_2$  in mass % on the basis of amount of total oxides.

9. (original) Low expansion transparent glass-ceramics as defined in claim 1 containing three or more ingredients among RO ingredients (where R is Mg, Ca, Sr, Ba or Zn) in an amount of 0.5% or over in mass % on the basis of amount of total oxides for respective ingredients.

10. (original) Low expansion transparent glass-ceramics as defined in claim 9 containing ZnO in a larger amount than other RO ingredients in mass % on the basis of amount of total oxides.

11. (original) Low expansion transparent glass-ceramics as defined in claim 9 containing a total amount of the RO ingredients of 3.5% or over in mass % on the basis of amount of total oxides.

12. (original) Low expansion transparent glass-ceramics as defined in claim 1 containing a total amount of R'O ingredients (where R' is Mg, Ca, Ba or Sr) of 3% - 13% in mass % on the basis of amount of total oxides.

13. (original) Low expansion transparent glass-ceramics as defined in claim 1 comprising in mass % on the basis of amount of total oxides:

$\text{SiO}_2$

50 - 655

|     |  |            |
|-----|--|------------|
|     | $\text{Al}_2\text{O}_3$                                | 20 - 30%   |
|     | $\text{MgO}$   | 0.5 - 2%   |
|     | $\text{CaO}$   | 0.5 - 2%   |
|     | $\text{SrO}$   | 0 - 10%    |
|     | $\text{BaO}$   | 1 - 5%     |
|     | $\text{ZnO}$   | 0.5 -      |
| 15% |  |            |
|     | $\text{Li}_2\text{O}$                                  | 1.5 - 3.5% |
|     | $\text{TiO}_2$   | 3 - 6%     |
|     | $\text{ZrO}_2$   | 1 - 5%     |
|     | $\text{Nb}_2\text{O}_5$                                | 0 - 5%     |
|     | $\text{La}_2\text{O}_3$                                | 0 - 5%     |
|     | $\text{Y}_2\text{O}_3$                                 | 0 - 5%     |
|     | $\text{As}_2\text{O}_3$ and/or $\text{Sb}_2\text{O}_3$ | 0 - 2%.    |

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